AMENDMENT OF SOLICITATI	ON/MODIFICATI	ON OF CONTRA	CT	1. Contract I		Page 1 Of 10
2. Amendment/Modification No.	3. Effective Date	4. Requisition/Purchas	se Req		5. Project No.	(If applicable)
P00004	2001MAY02	SEE SCHEDU	JLE			
6. Issued By	Code W56HZV	7. Administered By (If		than Item 6)		Code S1501A
TACOM		DCM INDIANAPOI	LIS			
AMSTA-LC-CHBA		EMMETT J. BEAN	CENTE	R		
CHESTER L. RAY (810)574-5481		8899 E. 56TH ST				
WARREN, MICHIGAN 48397-5000		INDIANAPOLIS,	IN 46	249-5701		
HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: RAYC@TACOM.ARMY.MIL		con		DAG MONT	A D.D.	OW 001010
8. Name And Address Of Contractor (No., Stre	et City County State and	SCD		PAS NONE	ADP I nt Of Solicitation	PT SC1012
o. Name And Address Of Contractor (No., Stre	et, City, County, State and	Zip Code)	Ш	9A. Amenumer	it Of Solicitation	I INO.
AM GENERAL CORP						
AM GENERAL DIV HQ				9B. Dated (See	Item 11)	
105 N NILES AVE-PO BOX 7025				10A. Modification Of Contract/Order No.		
SOUTH BEND, IN 46634-7025			X	10A. Modificat	ion Of Contract	/Order No.
				DAAE07-00-C-	S053	
TYPE BUSINESS: Large Business Perfo	rming in U.S.	L.		10B. Dated (Se	e Item 13)	
Code OH3G6 Facility Code				2000AUG07		
11. T	HIS ITEM ONLY APPLI	ES TO AMENDMENTS	OF SO	DLICITATION	S	
The above numbered solicitation is amend	led as set forth in item 14.	The hour and date spec	ified fo	or receipt of Off	ers	
is extended, is not extended.						
Offers must acknowledge receipt of this amo						
(a) By completing items 8 and 15, and return						dment on each copy of the
offer submitted; or (c) By separate letter or	0					
ACKNOWLEDGMENT TO BE RECEIVED SPECIFIED MAY RESULT IN REJECTION						
change may be made by telegram or letter, I						
opening hour and date specified.						
12. Accounting And Appropriation Data (If red NO CHANGE TO OBLIGATION DATA	quired)					
NO CHENCE TO OBLIGHTION BITT						
	ITEM ONLY APPLIES T				DERS	
KIND MOD CODE: 7		act/Order No. As Describ	bed In		G (T) (I	
A. This Change Order is Issued Pursua The Contract/Order No. In Item 10.				The Ch	anges Set Forth	In Item 14 Are Made In
B. The Above Numbered Contract/Orde			nges (su	ich as changes i	n paying office,	appropriation data, etc.)
Set Forth In Item 14, Pursuant To T C. This Supplemental Agreement Is Ent	•					
D. Other (Specify type of modification a	<u> </u>					
27 State (speedy type of moduleation e						
E. IMPORTANT: Contractor is not,	<u> </u>	this document and retu			opies to the Issu	
14. Description Of Amendment/Modification (Organized by UCF section	headings, including solic	citation	/contract subje	ct matter where	feasible.)
SEE SECOND PAGE FOR DESCRIPTION						
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force						
and effect.	tions of the document refer	reneed in item 221 of 1021	i, as ne	retorore change	cu, remains une	langed and in fun force
15A. Name And Title Of Signer (Type or print)	16A. Name And		Of Contracting	Officer (Type o	r print)
		SHARLENE M.		.MIL (810)574	-4137	
15B. Contractor/Offeror	15C. Date Signed				11J/	16C. Date Signed
15D. Contractor/Offertul	13C. Date Signed	10D. Ollicu Sta	us OI	america		Too. Date Signed
	_	Ву		/SIGNED/		
(Signature of person authorized to sign)		, 0	ature o	f Contracting O		
NSN 7540-01-152-8070		30-105-02			STANDARD FO	ORM 30 (REV. 10-83)

Reference No. of Document Being Continued

PIIN/SIIN DAAE07-00-C-S053

MOD/AMD P00004

Page 2 of 10

Name of Offeror or Contractor: AM GENERAL CORP

SECTION A - SUPPLEMENTAL INFORMATION

The purpose of this modification is to provide for the following changes:

- I. Section C STATEMENT OF WORK
- 1. In section C.3.1.2 six (6) weeks are hereby added to the dates the GFE is to be provided to contractor, as follows:

"1 each M1025A2, Truck, Utility, Light Weapons Carrier 12 Sep 01 3 each M1097A2, Truck, Utility, Cargo Troop Carrier 12 Sep 01 3 each M1113, Truck, Utility, Heavy Shelter Carrier 12 Sep 01 3 each M1114, Truck, Heavy Up-Armored Vehicle 22 Aug 01"

- 2. Add: "C.8.1.1 In support of contractor testing under this contract, the contractor is authorized to obtain test support/services from Major Range and Test Facility Base (MRTFB) installations at Government rates."
- II. SECTION F DELIVERIES OR PERFORMANCE
- 1. The text in section F.1.1, <u>Prototype Testing Completion Data</u>, is deleted in its entirety and is replaced with the following: "The contractor shall complete its testing on the 2 prototype vehicles no later than 26 October 2001."
- 2. The text in section F.1.2, <u>Pilot Vehicle Delivery to Test Site</u>, is deleted in its entirety and is replaced with the following: "The contractor shall deliver HMMWV A4 pilot vehicles to the Government test site(s), as follows:

3ea M1113, 22 October 2001 3ea M1114, 22 October 2001 1ea M1025A2, 3 December 2001 3ea M1097A2, 3 December 2001"

III. Except as provided for herein, all other terms and conditions remain unchanged and in full force and effect.

*** END OF NARRATIVE A 005 ***

Reference No. of Document Being Continued

PIIN/SIIN DAAE07-00-C-S053

MOD/AMD P00004

Page 3 **of** 10

Name of Offeror or Contractor: AM GENERAL CORP

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

SECTION C - STATEMENT OF WORK

HIGH MOBILITY MULTIPURPOSE WHEELED VEHICLE (HMMWV)BLOCK A4 MODERNIZATION

C.1 GENERAL.

- C.1.1 The HMMWV Block A4 Modernization program is a design/development effort, which will leverage advancements in commercial and military truck technology for insertion into the HMMWV. The upgrades resulting from this program will result in increased system performance and reduced Operation and Support (O&S) costs. Vehicles will be required to meet the requirements of the HMMWV A4 System Specification, which is Attachment 1 to the contract. During performance of this effort, the contractor will be required to build prototypes, which will be subjected to contractor testing, including "shakedown". The contractor will also be required to build pilot vehicles, which will be subjected to Government testing. The contractor will provide test support, to include repair of new or upgraded components/hardware, reporting of field problems to the Government, and failure analysis during the
- C.1.1.1 The contractor shall assume total system responsibility for the HMMWV Block A4 Modernization (HMMWV A4) program. As an independent contractor, and not as an agent of the U.S. Government, the contractor shall furnish the supplies and services necessary to accomplish the efforts required herein. The contractor's responsibilities shall include maintaining control of subcontractor and/or vendor efforts to ensure Government requirements are met.
- C.1.2 Cost As an Independent Variable (CAIV).
- C.1.2.1 The Government's cost goals for this program are that the vehicle unit prices will not result in an increase of greater than 15% over the Fiscal Year 2000 unit prices for the equivalent HMMWV A2 models. The specific cost goals are:

	HMMWV A4 Cost Goal
M1025A2, Truck, Utility, Light Weapons Carrier	\$77,437
M1097A2, Truck, Utility, Cargo Troop Carrier	\$64,241
M1113, Truck, Utility, Heavy Shelter Carrier	\$77,695
M1114, Truck, Heavy Up-Armored Vehicle	\$87,556
M1025A2 Truck with Winch	\$79,635
Light Howitzer Towing	\$77,695

- C.1.2.2 The contractor shall notify the Government if any or all of the cost goals may be exceeded. The contractor shall report the status of achieving these goals during the Monthly Management Reviews (MMRs). For those cost goal(s) that will be exceeded, the contractor shall support the Government, by providing the necessary information, in making informed trade-off analyses.
- C.1.3 Data Deliverables.
- C.1.3.1 The contractor shall maintain HMMWV A4 cost data for all cost/cost plus fixed fee CLINs and report same. Typically, the Government requires monthly delivery of Performance and Cost Reports in accordance with DI-FNCL-80912 and CDRL A001. The contractor may satisfy this requirement by proposing the use of this data item, or an alternate method that provides the same information. The contractor may also provide this information to the Government via access to the contractor's database.
- C.1.3.2 <u>Electronic Data Delivery</u>. Unless otherwise required, data specified herein shall be delivered in electronic format. The file format and delivery method will be dependent upon the file type and size. The files shall be MS Windows 95/MS Office 97 Professional software compatible. Available methods of delivery are: electronic mail, file transfer protocol, 3.5-inch HD floppy disk, CD-ROM, Iomega Zip or Jazz. Details regarding the electronic delivery of the data deliverables shall be discussed during the start of work meeting.

C.2 MEETINGS

- C.2.1 The contractor shall conduct a Start of Work meeting at its facility in Livonia, Michigan, within thirty (30) calendar days after contract award. The actual date of the meeting shall be coordinated between the contractor and the Procuring Contracting Officer (PCO). The agenda of the meeting shall include all functional areas within the program.
- C.2.2 Monthly Management Reviews (MMRs). MMRs shall be held at the contractor's facility in Livonia, Michigan. The first MMR shall be held within thirty (30) days after the Start of Work meeting and shall continue monthly until the end of the contract. However, the Government reserves the right to schedule reviews at control points during the period of performance. The MMRs shall provide a means for coordinating and monitoring schedules and contract performance, thereby ensuring adequacy, timeliness and compliance with contractual requirements. At a minimum, MMRs shall include the status of the engineering development, vehicle build(s), quality assurance, integrated logistics support (ILS), safety, manpower and personnel integration (MANPRINT), configuration management areas, and CAIV goals. The contractor shall inform the Government of progress to date, and of actual or

Reference No. of Document Being Continued

PIIN/SIIN DAAE07-00-C-S053

MOD/AMD P00004

Page 4 of 10

Name of Offeror or Contractor: AM GENERAL CORP

potential schedule, cost, technical, or administrative problems. The duration of the meetings should not exceed one (1) day. contractor shall prepare written or visual presentations, as necessary, for such briefings.

- C.2.2.1 Major Design Review (MDR). Prior to contractor build of the pilot vehicles, the contractor shall conduct a MDR at its facility in Livonia, Michigan (approximately June 2001). The specific date shall be coordinated with the COTR. The MDR shall take the place of the MMR scheduled for that month. The purpose of the review is to (1) determine whether the detail design of the HMMWV A4 will satisfy the vehicle performance requirements; (2) establish the design compatibility among the configuration items of the HMMWV A4 and the production operational and support facilities; (3) assess risk on a technical, cost and schedule basis; (4) assess the results of producibility analyses; and (5) review the preliminary hardware product specifications.
- C.2.2.1.1 Specific topics to be addressed during the MDR include, but are not limited to: evaluation of design adequacy, design reliability, design maintainability, manufacturing and life cycle cost, unit production cost, equipment and parts standardization, contractor test results, maintenance data, spare parts, support equipment (to include standard and special tools and test equipment), MANPRINT, environmental impact and producibility. Contractor formatted drawings/specifications shall be available for Government review during the MDR.
- C.2.2.1.2 Upon Government approval of the MDR (notification of approval/disapproval will be provided within five business days of the review), the contractor is authorized to begin vehicle build of the pilots. If the contractor decides to start pilot vehicle build prior to Government approval of the MDR, it does so at its own risk.
- C.3 GOVERNMENT FURNISHED EQUIPMENT/INFORMATION (GFE/I):
- C.3.1 In performance of this contract, the following items will be provided to the contractor as GFE:
- C.3.1.1 For use during the HMMWV A4 development effort, the following vehicles will be provided to the contractor, in an as is condition, within thirty (30) days after contract award:
 - 1 each M1026
 - 2 each M1097
 - 1 each M1037
 - 1 each M966
 - 1 each M1114
 - 1 each M1025A2
- C.3.1.2 For use in building the ten each HMMWV A4 pilot vehicles for Government test, the following vehicles will be provided, less the parts listed in C.3.1.2.1, by the date specified:

1	each	M1025A2, Truc	k, Utility, Light Weapons Carrier	12	Sep	01
3	each	M1097A2, Truc	k, Utility, Cargo Troop Carrier	12	Sep	01
3	each	M1113, Truck,	Utility, Heavy Shelter Carrier	12	Sep	01
3	each	M1114, Truck,	Heavy Up-Armored Vehicle	22	Aug	01

C.3.1.2.1 Parts not provided:

Engine Brake Calipers Centerlink Transfer Case Brake Rotors Wheels and Tires Fuel Tank Top Plate Brake Lines Shock Absorbers

Steering Gear Master Cylinder Springs

Accelerator Cable Hydroboost Body Electrical Harness Accelerator Pedal Parking Brake Engine Electrical Harness

Defroster Ducts Pitman and Idler Arms Speedo Cable TCM

Axles Ball Joints

- C.3.1.3. The Government will provide one (1) each M1097A2 "demo" vehicle to the contractor for use in its Anti-lock Braking System (ABS) efforts under this contract. The vehicle is currently in contractor's possession and may be used for the stated purpose through the end of the contract.
- C.3.1.4. The Government will provide three (3) each Test Set Electronic Systems, A/N PSM 95 Soldiers? Portable On-System Repair Tool (SPORT) to the contractor for use in its development/integration efforts under this contract. The SPORTs is currently in contractor's possession and may be used for the stated purpose through 31 December 2001.
- C.3.2 The following items will be provided as GFI:
- $\hbox{C.3.2.1} \quad \hbox{HMMWV Final Inspection Record (FIR) (in the contractor's possession).}$

Reference No. of Document Being Continued

PIIN/SIIN DAAE07-00-C-S053

MOD/AMD P00004

Page 5 **of** 10

Name of Offeror or Contractor: AM GENERAL CORP

C.4 VEHICLE BUILD.

- C.4.1 Prototype Vehicles. The contractor shall build two (2) each HMMWV A4 prototype vehicles, which shall be subjected to contractor testing, including shakedown. The prototypes shall meet all the requirements of the HMMWV A4 System Specification (Attachment 1). The models to be built are as follows: one each M1097A4, one each M1113A1.
- C.4.2 Upon Government approval of the MDR, the contractor shall build and deliver ten (10) HMMWV A4 pilot vehicles for Government testing. The pilot vehicles shall meet all the requirements of the HMMWV A4 System Specification (Attachment 1), and incorporate any design changes required as a result of failures or problems discovered during the contractor testing. These vehicles shall be inspected in accordance with the FIR and delivered to the Government test site in accordance with the Section F delivery schedule. The vehicle configurations shall be: one each M1025A4, three each M1097A4, three each M1113A1, and three each M1114A1.

C.5 CONFIGURATION MANAGEMENT (CM).

- C.5.1 The Contractor shall establish a configuration management program defining the management system for configuration identification, configuration control, accountability for configuration changes and configuration audits. To maximize return on investment and reduce product and service life cycle costs, the Contractor shall use best practices to implement the technical and program management principles fundamental to configuration management. The application of the principles in source document Electronic Industries Alliance (EIA)-649 may be used to plan and document an appropriate CM program. The configuration management requirements defined herein shall also apply to any and all subcontractor efforts.
- C.5.2 All configuration changes proposed after the baseline (MDR see C.2.2.1) is established shall be processed using the contractor's Engineering Action Request (EAR) form and be processed through the Configuration Control Board (CCB) established for this developmental program. Changes proposed after pilot test vehicles are delivered shall be submitted for Government concurrence using the contractor format.
- C.6 CONTRACTOR FORMAT DRAWING PACKAGE. The contractor shall develop a Level II Technical Data Package (TDP), in contractor format. This TDP will combine Level III drawings for applicable existing HMMWV components, as well as Level II drawings for new components/parts. The drawings for new components/parts may be prepared using Unigraphics design software. The contractor shall maintain and update the TDP throughout the test cycle.

C.7 PRODUCT ASSURANCE.

- C.7.1 Quality System. The contractor shall establish, implement, document and maintain a quality system that ensures conformance to contractual requirements. The contractor shall implement the requirements of ANSI/ASQC Q9001, ISO 9001, or an equivalent quality system model; no third party certification is required. The Government reserves the right to conduct a quality audit of the contractor's system as part of the review of the contractor's program. A fifteen-day notification will be provided to the contractor prior to conduct of the audit.
- C.7.2 Using the current HMMWV A2 production FIR as a baseline, the contractor shall develop an end item FIR for each new HMMWV A4 vehicle configuration. The FIRs shall include all visual/functional inspection criteria for the total vehicle. The FIR shall be updated as required in Section E.4 to reflect all approved configuration changes.
- C.7.3 Welding Design and Welding Procedures. All weldments shall meet the design requirements for dynamically loaded weldments as specified in American Welding Society (AWS) D1.1 or a commercial equivalent, or better, that the contractor shall certify is equal to AWS. All structural aluminum weldments shall meet the design criteria for dynamically loaded weldments in AWS D1.2 or a commercial equivalent or better that the contractor shall certify is equal to AWS.
- C.7.3.1 The contractor is responsible for quality and consistency of automatic welding equipment as well as required certification of welders. All welder certifications and welding procedures shall be available to the Government during the performance of this contract.
- C.7.3.2 Weld Inspectors: Weld quality and workmanship shall be verified by qualified weld inspectors that are trained to perform the specific functions they are assigned.

C.8 CONTRACTOR TEST SUPPORT.

- C.8.1 The contractor shall conduct its testing on the prototype vehicles; results of this testing will be included as part of the Government's test program. Contractor testing shall include shakedown, which will evaluate adequacy of the HMMWV A4 design and its ability to meet the performance requirements in accordance with the System Specification. The Government may witness any contractor testing and may review related contractor engineering notes. The contractor shall provide the COTR verbal notification within five business days prior to conduct of test.
- C.8.1.1 In support of contractor's testing under this contract, the contractor is authorized to obtain test support/services from Major Range and Test Facility Base (MRTFB) installations at Government Rates.

Reference No. of Document Being Continued

PIIN/SIIN DAAE07-00-C-S053

MOD/AMD P00004

Page 6 of 10

Name of Offeror or Contractor: AM GENERAL CORP

- C.8.2 Contractor Test Support During Government Testing of Pilot Vehicles.
- C.8.2.1 The contractor is required to deliver test vehicles to the Government test site(s). The contractor shall provide any special tools, detailed operating and maintenance instructions and/or unique test equipment required for test to the test site(s)(see E.6.2). The contractor shall provide a Test Support Package (TSP) at each test site containing recommended repair parts (consumables and expendables) for the test duration (approximately six months). Parts not available in the TSP (including M1114 and armoring parts) must be provided to the test site within 24 hours of Government request. All items that comprise the TSP shall be of the same configuration and source as will be used on the vehicles delivered for test. In addition to the TSP, the contractor is required to provide on-site technical support within 24 hours of Government request. Technical support includes assessment of hardware problems and assistance with the operation, maintenance and repair of the test vehicles or components and evaluation of specified Test Incident Reports (TIRs).
- C.8.2.2 The Contractor shall notify the Government of the TSP items (part prices listed in Attachment 3) to be provided (by test site) no later than 150 days after contract award. The notification shall include an indication of which TSP items will not be sent to the test site(s), but will be available within the 24-hour window.

C.9 RELIABILITY/MAINTAINABILITY

- C.9.1 The contractor will be provided a copy of all Test Incident Reports (TIRs) directly from the test site(s) during Government testing via e-mail. When directed by the Government, the contractor shall assess the failure and shall furnish a Failure Analysis and Corrective Action Report (FACAR) in accordance with DI-RELI-81315 (CDRL A002) and Attachment 2. The FACAR shall address the corrective action taken or proposed to prevent recurrence of the incident on subsequent production items. Corrective actions proposed by the contractor that require configuration changes shall be submitted to the Government for approval.
- C.9.1.1 FACAR time requirements for submittal after TIR release:

TIR Incident Class	<u>Initial (Telephonic)</u>	<u>Interim</u>	<u>Final</u>
Critical	One Work Day	Within 3 work days	Within 30 days
Major	None required	Within 10 work days	Within 30 days
Minor	None required	None required	Within 30 days

Critical: A defect shall be designated critical when it impacts safety.

Major: A defect shall be designated major when involving health, performance, interchangeability/reliability/survivability/maintainability/durability of the item or its repair parts, effective use or operation, weight, or appearance.

Minor: A defect is considered minor when none of the factors of the above paragraphs are considerations.

- C.9.1.2 FACAR Review. All responses shall be reviewed by a Government Review Board. If the contractor's response is rejected, the Government will notify the contractor, in writing, explaining in detail why the response was unacceptable. The contractor shall submit a reviewed response within thirty days of the rejection.
- C.9.1.3 The contractor shall correct, on-site, as part of its technical support to testing, all test-disclosed deficiencies, except for those which, due to the severity of the failure, cannot be corrected cost effectively. In the event that deficiencies cannot be corrected cost effectively, as mutually determined by the contractor and the Government, the Government and the contractor shall mutually agree to a plan to resolve the issue.
- C.9.1.4 Corrective Action Review Boards (CARB). The contractor shall support the CARB with presentations and technical information, as required, to support the proposed correction actions to test incidents. Further, a contractor representative shall present the corrective actions at the CARB reviews. CARBs will commence after about halfway through the RAM durability test, and continue meeting every six weeks until all of the test incidents are closed out.
- C.9.1.5 Scoring Conferences. The contractor shall support Reliability, Availability and Maintainability (RAM) Scoring Conferences during all testing with presentations and technical information as required to support the proposed corrective actions to test incidents. Scoring conferences will commence approximately 45 days after RAM durability vehicles begin running mileage, and will recur every six weeks until all the TIRs have been officially scored. Assessment Conferences will require the contractor to analyze and recommend changes and corrective actions to enhance the RAM of the vehicles that were tested.
- C.9.1.6 All critical and major TIRs shall be resolved in the timeframe listed in paragraph C.9.1.

Reference No. of Document Being Continued

PIIN/SIIN DAAE07-00-C-S053

MOD/AMD P00004

Page 7 **of** 10

Name of Offeror or Contractor: AM GENERAL CORP

- C.10.1 System Safety Working Group (SSWG). The contractor shall participate as a member of the HMMWV A4 SSWG. This participation shall include activities such as:
 - a. Presentation of the contractor's safety program status, including results of design or operations risk assessments.
 - b. Presentation or update of the hazard log or hazard log issues.
- c. Presentation of results of analyses of safety problems identified by the contractor or Government during the contract period to include correction actions.
 - d. Responding to action items assigned by the chairman of the SSWG.
 - e. Attend all SSWG meetings.
- C.10.2 Safety Engineering. The contractor shall integrate system safety engineering into the system design effort. System design and operational procedures developed by the contractor shall consider, but not be limited to, the following:
- a. Identifying hazards associated with the system by conducting safety analyses and hazard evaluations. Analysis shall include both operational and maintenance aspects of the vehicle, along with potential interface problems with planned subsystems.
 - b. Eliminating or reducing significant hazards by appropriate design or material selection.
 - c. Controlling or minimizing hazards to personnel that cannot be avoided or eliminated.
- d. Locating equipment components and controls so that access to them by personnel during operation, maintenance, or adjustments shall not require exposure to hazards such high temperature, chemical burns, electrical shock, cutting edges, sharp points, or concentration of toxic fumes above established threshold limit values. All moving parts, mechanical power transmission devises, exhaust system components, pneumatic components, and hydraulic components that are of such a nature or so located as to be a hazard to operating or maintenance personnel, shall be either enclosed or guarded. Protective devices shall not impair operational functions.
- e. Ensuring that suitable warning and caution notes are included in instructions for operation, maintenance, assembly, and repair and distinct markings placed on hazardous components of equipment.
 - f. Ensuring that safety is considered for both operational and maintenance phases of the system.
- C.10.3 System Safety Program (SSP). To assure the safety objectives are achieved, the contractor shall implement a System Safety Program.
- C.10.3.1 Hazard Identification. The contractor shall brief information concerning identified hazards at the MMRs so they can be entered into the Government Hazard Tracking System. As a minimum, the following information shall be provided for each hazard:
 - a. Description of hazard, to include cause, possible effect, hazard category
 - b. Status of hazard
 - c. Proposed corrective action
- C.10.4 Safety Assessment Report (SAR). As a result of the safety analyses, hazard evaluations, and any independent contractor testing, the contractor shall prepare SAR documenting the changes made to the system and the impact the changes have on the operation of the system. The SAR shall identify all vehicle safety features, discuss all potential safety and health related problems areas and shall establish special procedures and/or precautions to be observed by Government test agencies and system users. The SAR shall be prepared in accordance with DI-SAFT-80102A and CDRL A003.
- C.10.4.1 In the event the system is modified or procedural changes made after the final SAR is submitted, the contractor will update the SAR to reflect those modifications or changes.
- C.10.5 Health Hazard Assessment (HHA). The contractor shall prepare a Health Hazard Assessment Report. The HHA Report shall be incorporated into or provided as an addendum to the SAR. This report shall identify health hazards and make recommendations concerning engineering controls, equipment, and/or protective procedures, to reduce the associated acceptable risk. Issues to be addressed within the report shall include but not be limited to:
 - a. Noise
 - b. Toxic Gases

Reference No. of Document Being Continued

PIIN/SIIN DAAE07-00-C-S053

MOD/AMD P00004

Page 8 of 10

Name of Offeror or Contractor: AM GENERAL CORP

- (1) Carbon Monoxide
- (2) Ammonia
- (3) Oxides of nitrogen and sulfur
- (4) Acrolein
- c. Toxic Chemicals
- d. Ionizing or non-ionizing radiation
- e. Heat and Cold (to include heat stress)
- f. Shock and vibration to crew members
- g. Address the chemicals identified in the Materiel Safety Data Sheets to be provided in the SAR (DI-SAFT-80102A).
- C.10.6 Radioactive Material. Radioactive material shall not be used in any items or material provided to the Government as part of this contract.
- C.10.7 Pollution Prevention. The Contractor shall plan, implement, monitor and maintain an effective Pollution Prevention Program/Hazardous Material Management Program (PPP/HMMP). NAS411 may be used as guidance. The purpose of this program is to eliminate or minimize (where elimination is not possible) hazardous and environmentally unacceptable materials throughout the life cycle of the vehicle to ensure protection of human heath and the environment.
- C.11 RESERVED
- C.12 MANPRINT
- C.12.1 The contractor shall consider and implement MANPRINT program to ensure the integration of MANPRINT into the HMMWV A4. The focus of the HMMWV A4 MANPRINT effort shall be to enhance soldier-system performance and optimize Soldier-Machine Interface (SMI) for ease of operation and maintenance by designated users under all required operational conditions. MANPRINT design related issues, accomplishment and crew performance validations/demonstrations shall be addressed in the MMRs.
- C.12.2 Manpower, Personnel, and Training (MPT). The contractor shall maintain the manpower requirements for operation and maintenance within the current level identified in the Quantitative and Qualitative Personnel Requirements Information (QQPRI). The contractor shall avoid critical crew tasks that require upgrading the skill level of the target audience including cognitive and physical requirements. Training requirements for the crew shall not require an increase over the course length for the target audience by Military occupational Specialties (MOS).
- C.12.3 Transportability. The Contractor shall submit a transportability report for the HMMWV A4 in accordance with DI-PACK-80880B and CDRL A004. This information shall include engineering descriptions of lifting and tiedown provisions including type, location and strength and all vehicle dimensions including Gross Vehicle Weight/Gross Combined Weight (GVW/GCW), length, width, height, axle loads and locations, Center of Gravity (CG) at GVW, CG at GCW.
- C.13 INTEGRATED LOGISTICS SUPPORT.
- C.13.1 The contractor shall conduct an ILS Program in order to plan, manage, validate, execute and deliver logistics data and services for the HMMWV A4 Program. The contractor shall ensure ILS considerations are an integral part of the overall system. The objectives of ILS are to optimize material readiness; provide cost effective logistics support; and identify/evaluate resources required to develop, acquire, and manage HMMWV A4 modifications. ILS requirements shall be completed to the latest vehicle configuration. The Contractor shall provide support necessary to accomplish all ILS development, reviews, and validations.
- C.13.2 Existing Government tools and Test Measurement Diagnositic Equipment (TMDE) shall be utilized to the maximum extent possible. Introduction of new special tools/TMDE will require Government approval. The Government will use Contact Test Set (CTS) or Soldier's Portable On-System Repair Tool (SPORT) for interactive fault isolation.
- C.13.3 The contractor shall select expendable or consumable items from the military supply system. The contractor shall seek alternatives for any items that contain Class I and/or Class II Ozone Depleting Chemicals (ODC) or hazardous materials (HAZMATs) listed in EPA 17 of the Environmental Protection Agency's 33/50 Reduction Program.
- C.13.4 Maintenance Planning. The contractor shall not degrade current HMMWV maintenance plans. Additional maintenance planning necessitated from design changes/updates/ modification shall be based on a three level maintenance structure. For new or changed components, the Contractor shall determine the most effective and efficient procedures for performing maintenance, identify the extent of maintenance action for each repairable item, and identify the maintenance level to perform maintenance tasks. Variables, such as repairable item price, down-parts price, failure rate of repairable item, labor costs, costs of special tools and TMDE, and test program costs shall be considered.

Reference No. of Document Being Continued

PIIN/SIIN DAAE07-00-C-S053

MOD/AMD P00004

Page 9 of 10

Name of Offeror or Contractor: AM GENERAL CORP

C.13.5 Publications. The contractor shall provide one copy of the HMMWV Operators Manual with each vehicle. The Operators Manual shall contain all updates necessary to support the configuration of the vehicle being tested. Updates shall be integrated within the procedures in accordance with MIL-STD-38784 and CDRL A005 (marked-up pages will not be acceptable).

C.13.5.1 The contractor shall provide Unit through Direct Support maintenance and repair parts instructions in accordance with MIL-STD-38784 and CDRL A006. The instructions shall contain all updates, including the Maintenance Allocation Chart (MAC), necessary to support the configuration of the vehicle being tested. The manual shall be provided in Adobe Acrobat.PDF format.

C.13.6 Training/Contractor Technical Assistance. The Contractor shall provide a Field Service Representative(s) at each test site who shall advise and make recommendations to orient and instruct Government personnel with respect to operation, maintenance, repair, and Contractor parts supply for the end items provided, including all components. Such representatives shall be thoroughly experienced and qualified to advise and instruct Government personnel in the operation, maintenance, repair, and Contractor parts supply of the end item.

*** END OF NARRATIVE C 001 ***

Reference No. of Document Being Continued

PIIN/SIIN DAAE07-00-C-S053

MOD/AMD P00004

Page 10 of 10

Name of Offeror or Contractor: AM GENERAL CORP

SECTION F - DELIVERIES OR PERFORMANCE F.1 DELIVERY SCHEDULE

F.1.1 Prototype Testing Completion Date:

The contractor shall complete its testing on the 2 prototype vehicles no later than 26 October 2001.

F.1.2 Pilot Vehicle Delivery to Test Site:

The contractor shall deliver HMMWV A4 pilot vehicles to the Government test site(s), as follows:

3ea M1113, 22 October 2001 3ea M1114, 22 October 2001 1ea M1025A2, 3 December 2001 3ea M1097A2, 3 December 2001

F.1.3 Test Support Package:

The contractor shall deliver the Test Support Package (TSP) to the Government test site(s) concurrently with the A4 pilot vehicles.

F.1.4 Contractor Format Drawing Package:

The contractor shall deliver the Contractor Format Drawing Package not later than 2 October 2002.

F.1.5 Contract Period of Performance:

The period of performance of this contract is from the date of contract award through 2 October 2002.

*** END OF NARRATIVE F 001 ***